

REMARKS

Claims 1, 2, 4-6, 9, 10 and 52-70 are pending in the application and have been rejected by the Examiner. The claims are hereby canceled and rewritten as claims 71-103 incorporating amendments. The order of the claims has been adjusted so that dependent claims are grouped together with their base claim.

In light of the amendments and arguments herein, Applicant requests that all pending claims be considered allowable. Applicant also respectfully requests the finality of the rejection be withdrawn because the Office Action contains a new rejection and that rejection is improper.

Claim amendments

Independent claims 1 and 5 have been rewritten as claims 71 and 83 to recite a composition comprising an IAA derivative in an effective amount and ratio with an additional plant growth regulator to increase plant growth. New claims 77-82, which are dependent on claim 71, provide ranges for the effective amounts and ratios. Support for these amendments can be found on page 21, lines 13-24, and page 27, lines 21-29. Claims 74 and 75 (formerly claims 9 and 10) and claim 76 have been made to depend from claim 71.

Claim 52 has been rewritten as claim 85 to additionally require a plant sample capable of forming an embryogenic callus in combination with a kit. New claims 87 and 88 have been added and further state that the plant sample of claim 85 is a section of a mature plant embryo, more specifically, the middle section of a mature plant embryo. Support for these amendments can be found in the specification starting on line 19 on page 7 through line 8 on page 8, and on page 30, lines 20-31.

Claim 57 has been rewritten as claim 92 to include an IAA derivative in an amount and ratio to the addition plant growth regulator effective to form an embryogenic callus. Support for these amendments can be found on pages 7-8, page 21, lines 18-24, page 27, lines 21-29, and page 29, Table 1.

Claim 54 has been rewritten as claim 93 to additionally require a transgenic plant sample in combination with the kit. Support for this amendment can be found on pages 24-26.

Other minor changes have been to claims to improve clarity, correct errors, and to correct dependencies.

Previous rejections

In the previous Office Action, mailed 09/12/2002, the claims were rejected under the judicially created doctrine of obviousness-type double patenting over claims 1-22 of Lin et al. (5,674,731) and under 35 U.S.C. 102(b,e,f & g) as being anticipated by Lin et al. Applicant provided amendments and arguments in response to these rejections in the Amendment and Response mailed 02/12/2003. Because the Examiner did not repeat or reassert these rejections in the present Office Action, as is required under §707.07 (e) of the MPEP and 37 CFR 1.113(b), Applicant assumes that these rejections were withdrawn by the Examiner.

Additionally, on page 3 of the Office Action mailed 09/12/2002, the Examiner stated additional concerns over the issue of priority under 35 U.S.C. 102(g) and possibly 35 U.S.C. 102(f). Because the Examiner did not repeat these concerns in the present Office Action, Applicant assumes the Examiner's concerns were assuaged by the amendments and arguments made in the Amendment and Response mailed 02/12/2003.

Rejections over Engvild (Phys Plant 44)

Claims 1, 2, and 4-6 to a composition comprising an IAA derivative were rejected under 35 U.S.C. 102(b) as being anticipated by Engvild. Engvild discloses IAA derivatives that inhibit plant growth, however, Engvild does not disclose examples of IAA derivatives in amounts and ratios with cytokinins that

increase plant growth. The examples disclosed in Engvild state the degree which the IAA derivatives inhibit shoot formation. Engvild further states that any callus growth is variable, not a good measure of auxin activity, and apparently determined by the cytokinin. Thus, Engvild does not anticipate a claim to an effective amount of an IAA derivative and in an effective ratio with an additional plant growth regulator that increases growth.

Accordingly, claims 1 and 5 have been rewritten (as claims 71 and 83) to recite a composition comprising an IAA derivative in an effective amount and ratio with an additional plant growth regulator to increase plant growth. In light of these amendments, Applicants respectfully traverse the 102(b) rejections over Engvild to claims 1 and 5 (now 71 and 83), and the corresponding dependent claims 2, 4, and 6 (rewritten as claims 72, 73 and 84). Likewise, the rejections to claims 9 and 10 (now claims 74 and 75) should be withdrawn in light of the amendments making those claims dependent on claim 1 (now claim 71).

Claims 52, 53, and 57-60 to kits for the production of an embryogenic callus were rejected under 35 U.S.C. 102(b) as being anticipated by Engvild.

Claim 52 has been rewritten as claim 85 to recite a plant sample capable of forming an embryogenic callus in combination with a kit comprising an IAA derivative. Embryogenic callus is morphologically and functionally different from callus, and the methods and materials employed for the growth of callus would not be the same as those used to produce the desirable morphology and function of embryogenic callus. Engvild does not disclose use of an IAA derivative with an embryogenic callus or plant samples capable of forming an embryogenic callus. In light of the amendments, the 102(b) rejections over Engvild to claim 52 (now claim 85) and its dependent claims, 53 and 58-60 (now claims 86 and 89-91), are traversed.

Claim 57 has been rewritten as claim 92 to recite an IAA derivative in an amount and ratio to the additional plant growth regulator effective to form an embryogenic callus. Engvild does not disclose IAA derivatives that enhance formation of an embryogenic callus or that are used in conjunction with embryogenic callus. For the examples disclosed in Engvild, callus growth is variable, determined mainly by the cytokinin, and not a good measure of auxin activity. Engvild, therefore, not only fails to disclose an IAA derivative for embryogenic callus growth, but also fails to disclose an amount and ratio of an IAA derivative effective to enhance normal callus growth. In light of the amendment, the 102(b) rejection to claim 57 (now claim 92) should be withdrawn.

Claims 54-56 and 61-70 to a kit for the regeneration of a plant sample were rejected under 35 U.S.C. 102(b) as being anticipated by Engvild.

Claim 54 has been rewritten as claim 93 to recite a transgenic plant sample in combination with a kit comprising an IAA derivative. Engvild does not disclose the use of transgenic plant samples with an IAA derivative. In light of the amendment, the 102(b) rejection to claim 54 (now claim 93) and its dependent claims 94-103 are traversed.

Rejections over Lin et al. (5,674,731)

The Examiner states that the claims “remain rejected under 35 U.S.C. 102(b,e) as being obvious over Lin et al.” This appears to be a new rejection of the claims as obvious over Lin et al. The term “remain,” however, is incorrect. No obviousness rejection over Lin et al. has been made in a previous office action in this case. Furthermore, the new obviousness rejection is improper because no explanation of the reasons for the rejection has been given. Although an obviousness-type double patenting rejection was previously made, and apparently has been withdrawn, an obviousness rejection is a separate rejection based on distinct grounds. The reasoning given for the earlier

obviousness-type double patenting rejection cannot be applied to the new obviousness rejection. In the absence of an explanation of the rejection, it is unclear why the Examiner believes the claims to be obvious and Applicant is not given a full opportunity to respond with any specificity to the rejection. The Examiner has not pointed to any specific teaching or suggestion in the Lin et al. reference that could indicate that any IAA derivative should be substituted for 5-Br-IAA of the reference. In the absence of an explanation of the basis of the rejection, it is improper and should be withdrawn.

Applicant further emphasizes that the present claims exclude 5-Br-IAA and that there is no teaching or suggestion in the Lin et al. reference to substitute 5-Br-IAA with any other molecule and no specific teaching or suggestion to substitute 5-Br-IAA with any other substituted IAA, particularly those recited in the claims of this application.

In the absence of a proper rejection, and in view of the absence of any teaching or suggestion in the cited art to use the substituted IAA's as claimed herein, this rejection should be withdrawn.

Withdrawal of Finality

Applicant respectfully requests reconsideration of the imposition of finality in this case because the Office Action contains a new rejection and the rejection is improper. A 35 U.S.C. 103 rejection over Lin et al. could have been made earlier in prosecution and was not made. Applicant has not been given a full and fair opportunity to respond to this new rejection. Furthermore, as submitted above, no explanation of the reasons for the rejection has been given.

Supplemental IDS

Assuming that the finality of the rejection will be withdrawn, Applicant has submitted herewith a Supplemental Information Disclosure Sheet under 37 C.F.R. 1.97(c) with the appropriate fee.

Conclusion

Since finality of rejection is improper and should be withdrawn, Applicant respectfully requests full consideration of the amendments, arguments and supplemental IDS submitted. Further, in view of the amendments and arguments presented herein, the claims remaining in this case should be considered allowable and passage to issuance is respectfully requested. The response is accompanied by a Petition for Extension of Time and appropriate fee. If the enclosed fees are incorrect, please charge any deficiency or credit any overpayment to deposit account 07-1969.

Respectfully submitted,


Sally A. Sullivan
Reg. No. 32,064

Greenlee, Winner and Sullivan, P.C.
5370 Manhattan Circle, Suite 201, Boulder, CO 80303
Phone: (303) 499-8080; FAX: (303) 499-8089
Email: Winner@Greenwin.com
Attorney Docket No. 28-00
lem:December 3, 2003